

The NBS Data Warehouse

Robert Hanna

The NBS Data Warehouse

- What is it?
- Why do we need it?
- What will it be like?
- When will we have it?

What is a Data Warehouse?

DSS is NOT OLTP

- Decision Support System
- Query Centric
- Speed is key
- Examines Data in new and varied ways in real time
- On-Line Transaction Processing
- Update and Insert Centric
- Integrity is key
- Ensures data is represented the same way at all times

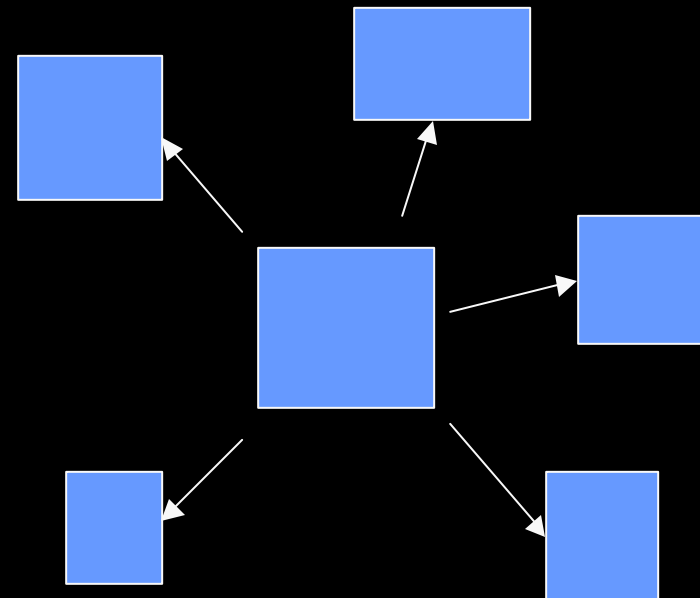
What is a Data Warehouse?



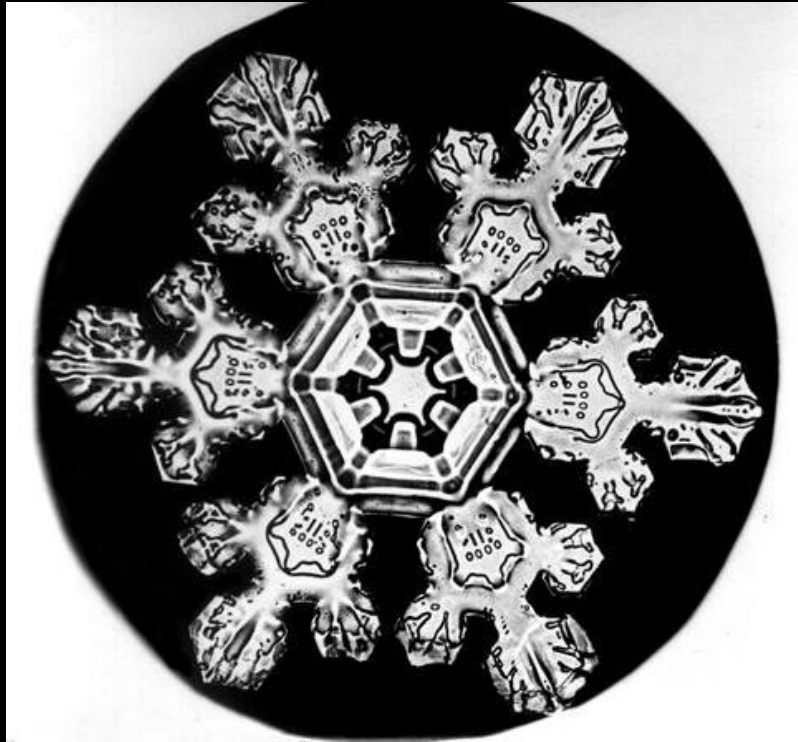
Star-Birth Clouds • M16
PRC95-44b • ST ScI OPO • November 2, 1995
J. Hester and P. Scowen (AZ State Univ.), NASA

HST • WFPC2

A Star (schema) is Born

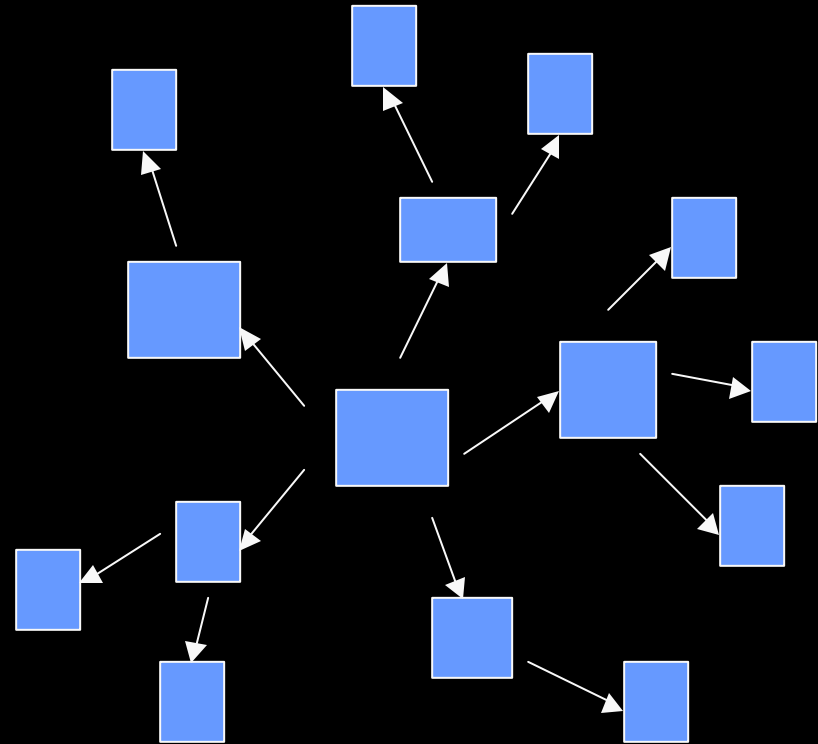


What is a Data Warehouse?



Wilson "Snowflake" Bentley

Snowflakes raining
down upon us



What is a Data Warehouse?



Drilling and Mining for Precious Items

- Drill Across Business Domains
- Collect Data from all sources
- Mine Data for patterns and trends



Why do we need a Data Warehouse?



Hardware Utilization

- Reports use from 5 to 45% of CPU cycles
- DSS systems use less CPU
- OLTP system can be tuned satisfy application needs only

Why do we need a Data Warehouse?



Storage Utilization

- Data Storage is more efficient in a star schema DSS
- DSS needs less instances than OLTP
- With a DSS in place, the OLTP system can be purged

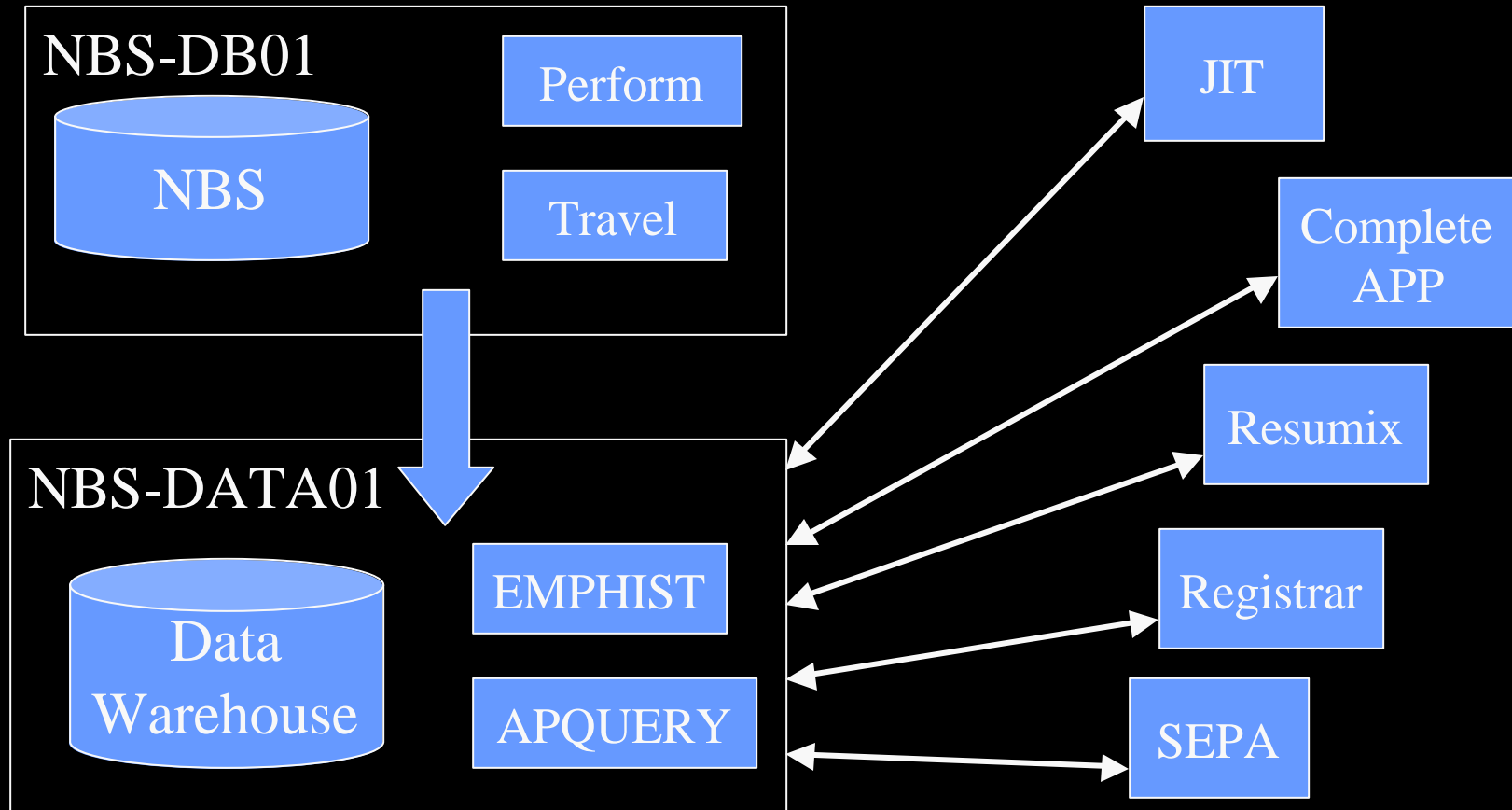
Why do we need a Data Warehouse?



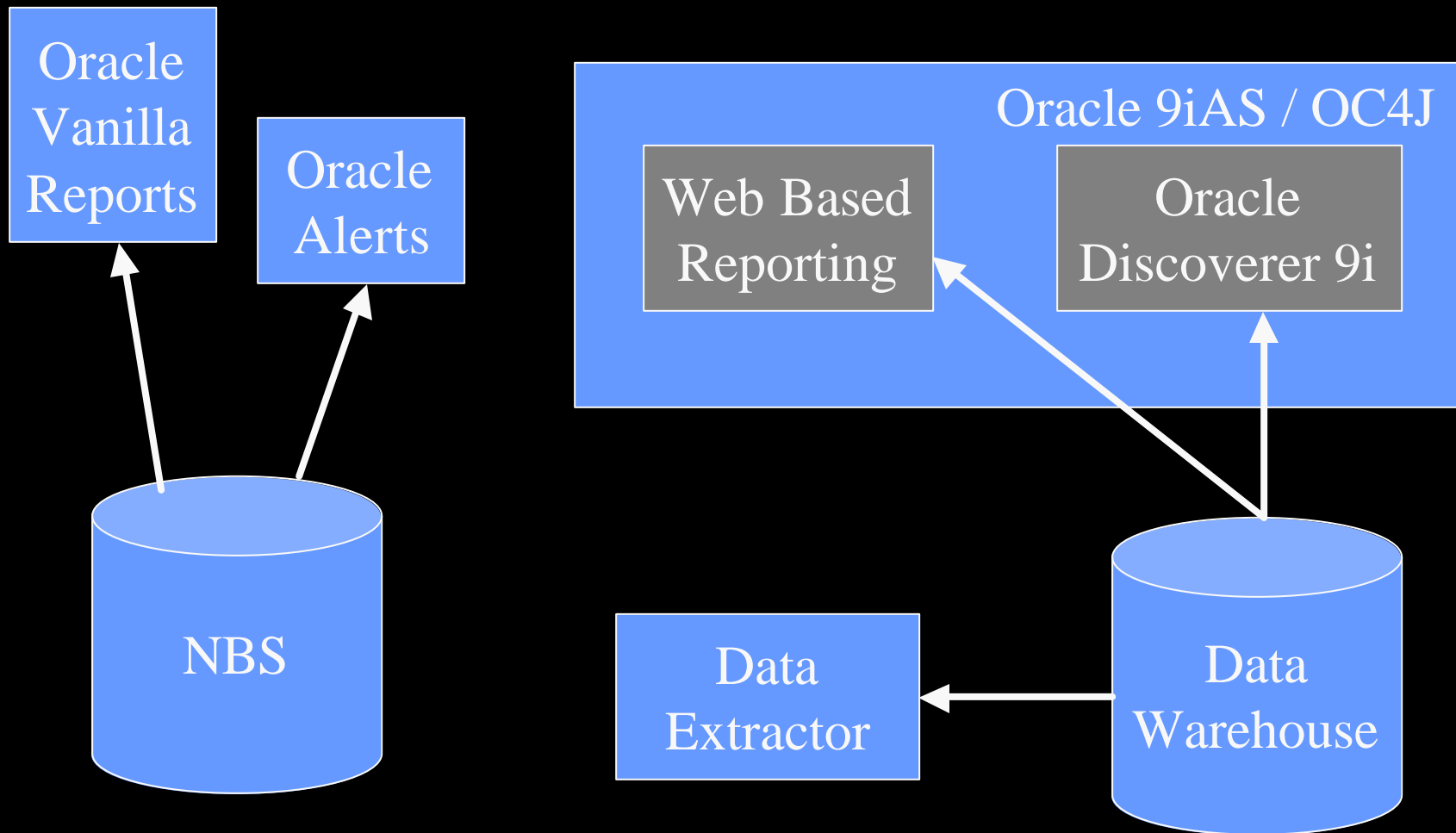
Customer Satisfaction

- Reports running from 10 to 1000 times faster
- An Intuitive Ad-Hoc environment
- Forecasting and Trend Analysis
- Reports insulated from OLTP change

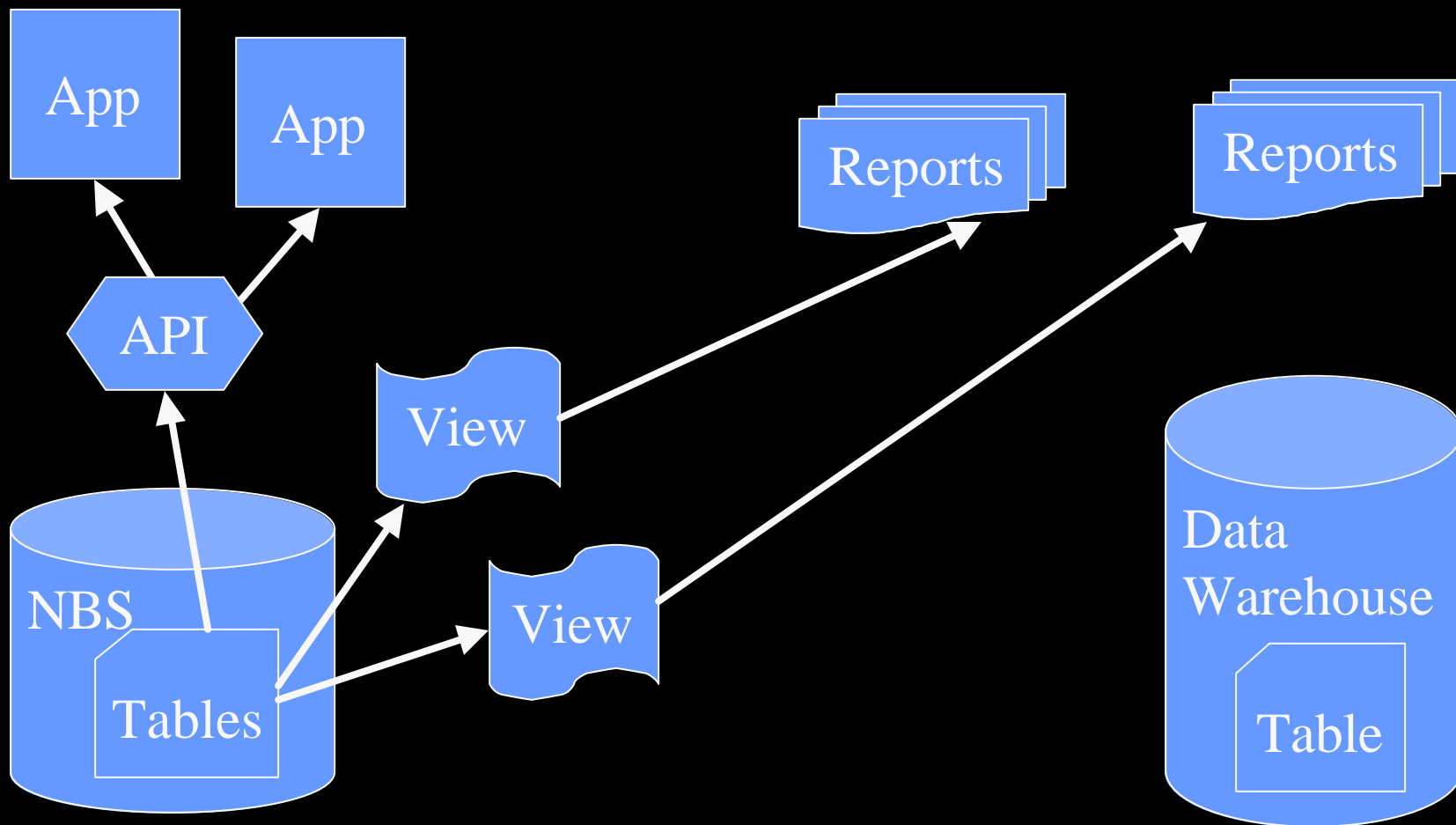
What will the Data Warehouse be like?



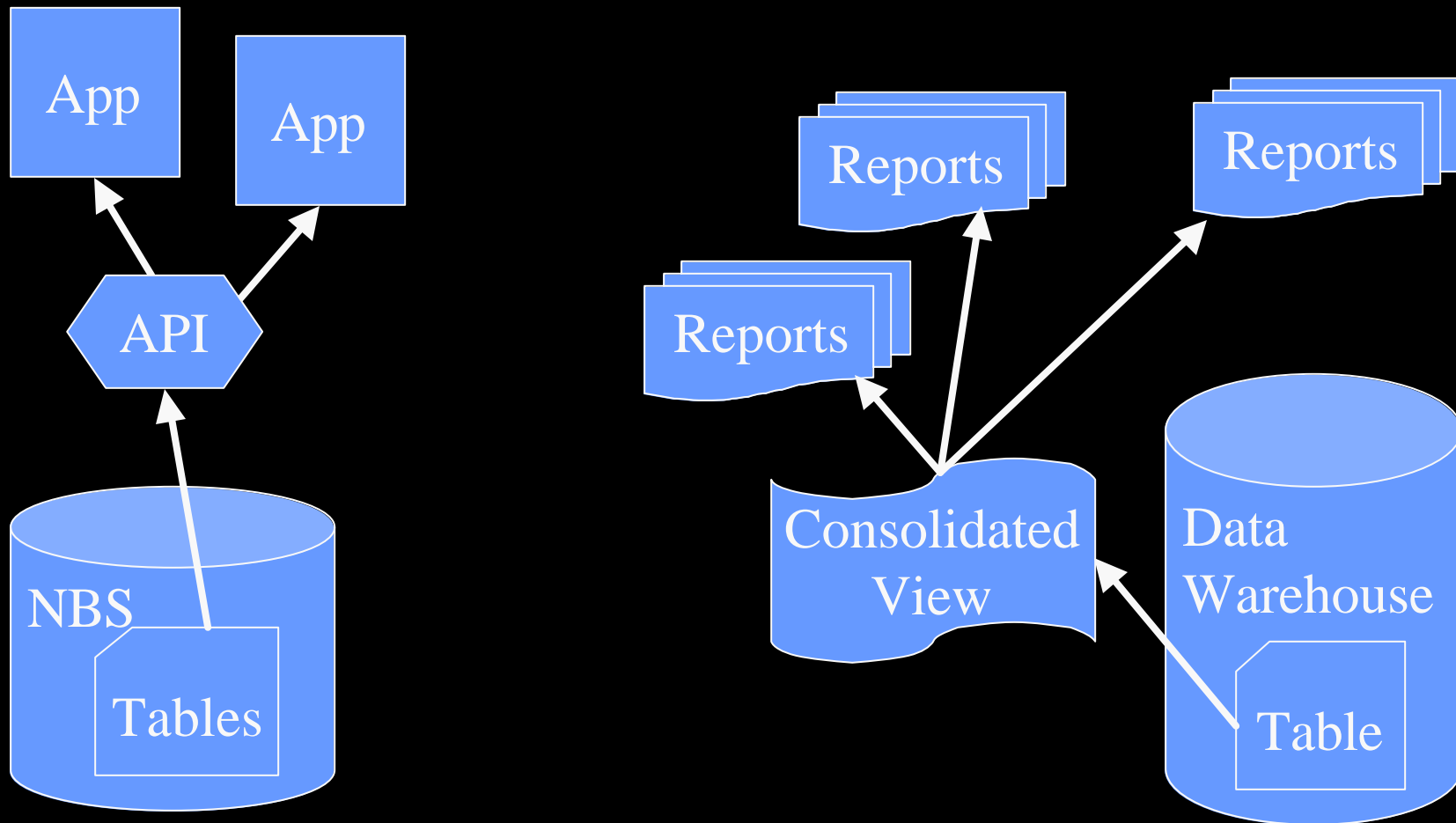
What will the Data Warehouse be like?



What will the Data Warehouse be like?



What will the Data Warehouse be like?



When will we have a Data Warehouse?

A Prototype is complete

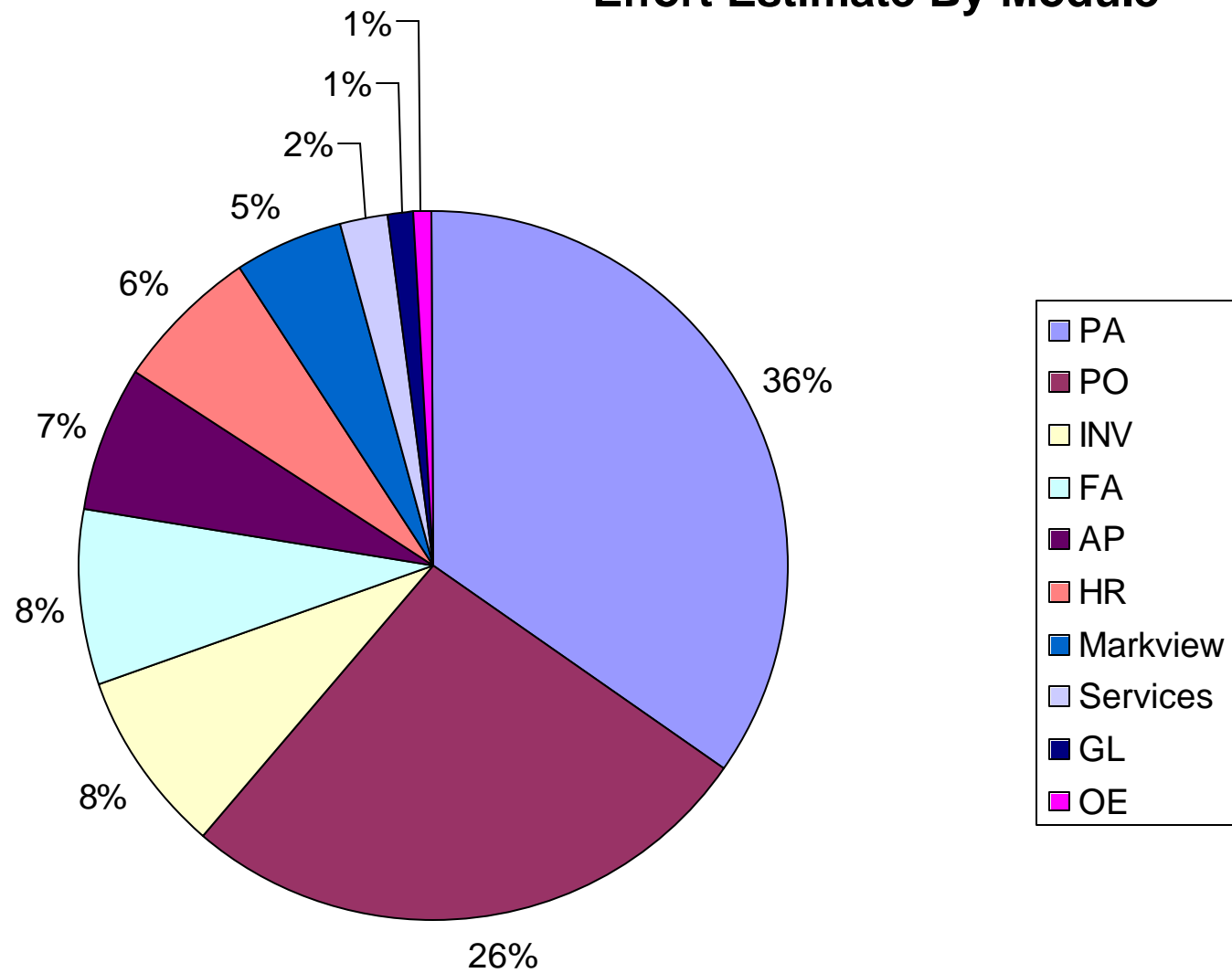
- Seven weeks of investigation
- Development Guidelines delivered
- PA, PO and AP were explored
- Reports ran from 10 to 1000 times faster
- Once learned, the schema was intuitive

When will we have a Data Warehouse?

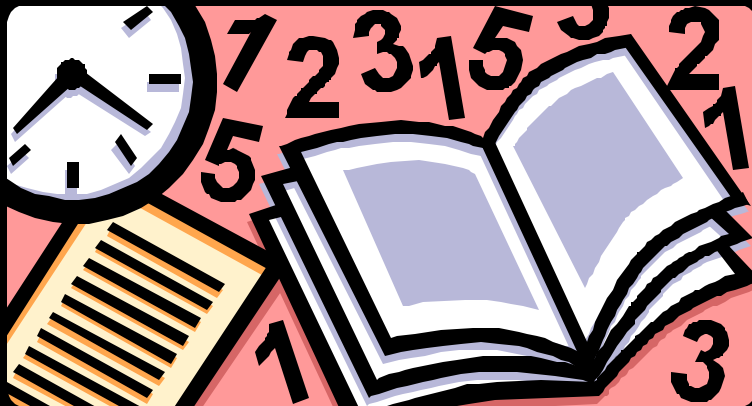
A Scope Analysis is complete

- Included PA, AP, PO, HR, Markview, Services, FA, INV and OM
- Included all Discoverer, Data Extractor and Custom Oracle Reports
- Effort Estimated by Module and Organization

Effort Estimate By Module



When will we have a Data Warehouse?



- Scope is still being defined
- The recovery is still underway
- Six months from inception at current scope
- Phased Deliverables
- Summer of '03 (not a promise)

Next Steps

- Learn more
 - <http://www.dpapps.com/>
 - Get a copy of the Documentation CD
 - View the Star Schemas
- Prepare
 - Think about how you might use a warehouse.
 - Consider what data you might want to have in a warehouse.
 - Talk with your supervisor and system manager